

IN THE CLAIMS:

1. (Currently Amended) An inspecting system comprising:

an analyzing unit including an image detection device to produce a plurality of images of a workpiece;

a storage unit to store said plurality of images produced by said image detection device and classification information;

a display screen unit to arrange a first display screen area for displaying said plurality of images stored in said storage unit that have not been classified and a plurality of second display screen areas for classifying and displaying said images on the same display screen; and ~~on a display screen, to display ones of said plurality of images stored in said storage unit that have not been classified, and to arrange a plurality of second display screen areas for classifying said images according to visual features of said images on the same display screen; and~~

a moving unit to allow user-manual-movement of each image of said plurality of images from the first display screen area to selected ones of the second display screen areas for defect-classification according to visual features of said images; on ~~said display screen from said first display screen area to selected second display screen areas to classify and display said images in said second display screen areas.~~

wherein unclassified images in the first display screen area and classified images within ones of the second display screen areas are simultaneously displayed on the same display screen, and the unclassified images can be classified by

visually comparing unclassified images in the first display screen area and classified images within ones of the second display screen areas.

2. (Currently Amended) An analyzing unit comprising:

a storage unit to store a plurality of images and classification information;

a display screen unit to arrange a first display screen area for displaying said plurality of images stored in said storage unit that have not been classified and a plurality of second display screen areas for classifying and displaying said images on the same display screen; and on a display screen, to display ones of said plurality of images stored in said storage unit that have not been classified, and to arrange a plurality of second display screen areas for classifying said images according to visual features of said images on the same display screen; and

a moving unit to allow user-manual-movement of ones of said plurality of images from the first display screen area to selected ones of the second display screen areas for defect-classification according to visual features of said images; on said display screen from said first display screen area to selected second display screen areas to classify and display said plurality of images in said second display screen areas.

wherein unclassified images in the first display screen area and classified images within ones of the second display screen areas are simultaneously displayed on the same display screen, and the unclassified images can be visually classified by comparing unclassified images in the first display screen area and classified images within ones of the second display screen areas.

3. (Currently Amended) A method of manufacturing an electronic device, wherein use is made of a manufacturing apparatus for processing a workpiece to form an electronic device, an inspecting apparatus for inspecting the workpiece processed by said manufacturing apparatus, an analyzing unit including an image detection device which is capable of producing a plurality of images of said workpiece, and a storage unit to store said images of said workpiece detected by said image detection device and classification information, the method comprising:

displaying said plurality of images stored in said storage unit that have not been classified on a first display screen area of a display screen, and displaying a plurality of second display screen areas for classifying and displaying said images according to visual features of said images on the same display screen;

manually moving ones of said images on said display screen from said first display screen area to selected second display screen areas to classify and display said detected images in said second display screen areas;

providing information to said analyzing unit concerning images in said second display screen areas of said screen; and

controlling the production line having said manufacturing apparatus arranged thereon using information obtained from said analyzing unit;

wherein unclassified images in the first display screen area and classified images within ones of the second display screen areas are simultaneously displayed on the same display screen, and the unclassified images can be visually classified by comparing unclassified images in the first display screen area and classified images within ones of the second display screen areas.

4. (Currently Amended) An inspecting system comprising:

an analyzing unit, said analyzing unit including an image detection device to produce images of semiconductor manufacturing defects for a workpiece;

a display screen having simultaneously arranged on a same screen both a sorting display screen area in which to display ones of said images with unclassified semiconductor manufacturing defects, and a plurality of defect-classification display screen areas into which each image of said images may be classified and displayed according to visual manufacturing defect features contained in the image; and

a user-manipulated moving unit to move a subject image from said sorting display screen area to selected ones of said defect-classification display screen areas, to classify and display said subject image in the selected ones of said defect-classification display screen areas;

wherein unclassified images in the sorting display screen area and classified images within ones of the defect-classification display screen areas are simultaneously displayed on the same display screen, and the unclassified images can be visually classified by comparing unclassified images in the sorting display screen area and classified images within ones of the defect-classification display screen areas.

5. (Previously Presented) An inspecting system as claimed in claim 4, wherein the user-manipulated moving unit includes a user-manipulated pointing device to point to, select and drag-and-drop said image from said sorting display screen area into selected ones of said defect-classification display screen areas.

6. (Previously Presented) An inspecting system as claimed in claim 5, wherein said user-manipulated pointing device is a mouse.

7. (Previously Presented) An inspecting system as claimed in claim 4, comprising a memory to store predetermined information for at least ones of said images including defect-classification information, and an adjuster unit to automatically adjust said defect-classification information for said images to match a defect classification of the selected one of said defect-classification display screen areas to which said images are moved.

8. (Currently Amended) An inspecting method, comprising:
using an image detection device to produce images of semiconductor manufacturing defects in a workpiece;

displaying images of unclassified semiconductor manufacturing defects within a sorting display screen area of a display screen, and displaying a plurality of defect-classification display screen areas on the same display screen into which each image of said images may be classified and displayed according to visual manufacturing defect features contained in the images; and

user-manipulated moving of a subject image from said sorting display screen area to selected ones of said defect-classification display screen areas, to classify and display each said image in the selected one of said defect-classification display screen areas;

wherein unclassified images in the sorting display screen area and classified images within ones of the defect-classification display screen areas are

simultaneously displayed on the same display screen, and the unclassified images can be visually classified by comparing unclassified images in the sorting display screen area and classified images within ones of the defect-classification display screen areas.

9. (Previously Presented) An inspecting method as claimed in claim 8, wherein said user-manipulated moving is effected with a user-manipulated pointing device to point to, select and drag-and-drop said images from said sorting display screen area into the selected ones of said defect-classification display screen areas.

10. (Previously Presented) An inspecting method as claimed in claim 9, wherein said user-manipulated pointing device is a mouse.

11. (Previously Presented) An inspecting method as claimed in claim 8, comprising:

storing predetermined information for at least ones of said images including defect-classification information in a memory; and

automatically adjusting said defect-classification information for said subject image to match a defect classification of the selected one of said defect-classification display screen areas to which said images are moved.

12. (Previously Presented) An inspecting system as claimed in claim 1, wherein images of multiple classified ones of the images are simultaneously displayable within ones of the second display screen areas.

13. (Previously Presented) An inspecting system as claimed in claim 1, comprising a data update unit to automatically update the classification information stored in the storage unit, for each image manually-moved to one of the second display screen areas.

14. (Previously Presented) An inspecting system as claimed in claim 1, comprising a user-classifier unit to allow user-designation of classification criteria for the plurality of second display screen areas into which each image of said images may be classified and displayed.

15. (Previously Presented) An analyzing unit as claimed in claim 2, wherein images of multiple classified ones of the images are simultaneously displayable within ones of the second display screen areas.

16. (Previously Presented) An analyzing unit as claimed in claim 2, comprising a data update unit to automatically update the classification information stored in the storage unit , for each image manually-moved to one of the second display screen areas.

17. (Previously Presented) An analyzing unit as claimed in claim 2, comprising a user-classifier unit to allow user-designation of classification criteria for the plurality of second display screen areas into which each image of said images may be classified and displayed.

18. (Previously Presented) A method as claimed in claim 3, wherein images of multiple classified ones of the images are simultaneously displayable within ones of the second display screen areas.

19. (Previously Presented) A method as claimed in claim 3, comprising automatically updating the classification information stored in the storage unit, for each image manually-moved to one of the second display screen areas.

20. (Previously Presented) A method as claimed in claim 3, comprising allowing user-designation of classification criteria for the plurality of second display screen areas into which each image of said images may be classified and displayed.

21. (Previously Presented) An inspecting system as claimed in claim 4, wherein images of multiple classified ones of the images are simultaneously displayable within ones of the defect-classification display screen areas.

22. (Previously Presented) An inspecting system as claimed in claim 4, comprising a user-classifier unit to allow user-designation of classification criteria for the plurality of defect-classification display screen areas into which each image of said images may be classified and displayed.

23. (Previously Presented) An inspecting system as claimed in claim 4, wherein the user-manipulated moving unit is also to move a previously classified

image from one of said defect-classification display screen areas to a differing one of said defect-classification display screen areas, to reclassify and display said classified image in the differing one of said defect-classification display screen areas.

24. (Previously Presented) An inspecting method as claimed in claim 8, wherein images of multiple classified ones of the images are simultaneously displayable within ones of the defect-classification display screen areas.

25. (Previously Presented) An inspecting method as claimed in claim 8, comprising allowing user-designation of classification criteria for the plurality of defect-classification display screen areas into which each image of said images may be classified and displayed.

26. (Previously Presented) An inspecting method as claimed in claim 8, comprising moving a previously classified image from one of said defect-classification display screen areas to a differing one of said defect-classification display screen areas, to reclassify and display said classified image in the differing one of said defect-classification display screen areas.

27. (Currently Amended) An inspecting system comprising:
an analyzing unit including an image detection device to produce a plurality of images of a workpiece;

a display screen unit to arrange a sorting display screen area on a display screen, in which plural ones of said images with unclassified semiconductor manufacturing defects are displayable, and to simultaneously arrange a plurality of defect-classification display screen areas into which each image of said images may be classified according to visual manufacturing defect features contained in the image on the same display screen; and

a user-manipulated moving unit to allow user-manual-movement of a subject image from said sorting display screen area to selected ones of said defect-classification display screen areas, to classify and display said subject image in the selected ones of said defect-classification display screen areas;

wherein images of multiple classified ones of said images are simultaneously displayable within ones of the defect-classification display screen areas; and

wherein unclassified images in the sorting display screen area and classified images within ones of the defect-classification display screen areas are simultaneously displayed on the same display screen, and the unclassified images can be visually classified by comparing unclassified images in the sorting display screen area and classified images within ones of the defect-classification display screen areas.

28. (Previously Presented) An inspecting system as claimed in claim 27, wherein said user-manipulated moving unit includes a mouse.

29. (Previously Presented) An inspecting system as claimed in claim 27, comprising a memory to store predetermined information for at least ones of said

images including defect-classification information, and an adjuster unit to automatically adjust said defect-classification information for said images to match a defect classification of the selected one of said defect-classification display screen areas to which said images are moved.

30. (Previously Presented) An inspecting system as claimed in claim 27, wherein the user-manipulated moving unit is also to move a previously classified image from one of said defect-classification display screen areas to a differing one of said defect-classification display screen areas, to reclassify and display said classified image in the differing one of said defect-classification display screen areas.

31. (Currently Amended) An inspecting method comprising:
using an image detection device to produce images of semiconductor manufacturing defects for a workpiece;
displaying on a display screen a sorting display screen area in which plural ones of said images with unclassified semiconductor manufacturing defects are displayable, and simultaneously displaying on the same display screen a plurality of defect-classification display screen areas into which each image of said images may be classified according to visual manufacturing defect features contained in the image; and

user-manipulated moving a subject image from said sorting display screen area to selected ones of said defect-classification display screen areas, to classify

and display said subject image in the selected ones of said defect-classification display screen areas;

wherein images of multiple classified ones of said images are simultaneously displayable within ones of the defect-classification display screen areas; and

wherein unclassified images in the sorting display screen area and classified images within ones of the defect-classification display screen areas are simultaneously displayed on the same display screen, and the unclassified images can be visually classified by comparing unclassified images in the sorting display screen area and classified images within ones of the defect-classification display screen areas.

32. (Previously Presented) An inspecting method as claimed in claim 31, wherein said user-manipulated moving is effected with a mouse.

33. (Previously Presented) An inspecting method as claimed in claim 31, comprising storing predetermined information for at least ones of said images including defect-classification information, and automatically adjusting said defect-classification information for said images to match a defect classification of the selected one of said defect-classification display screen areas to which said images are moved.

34. (Previously Presented) An inspecting method as claimed in claim 31, comprising moving a previously classified image from one of said defect-classification display screen areas to a differing one of said defect-classification

display screen areas, to reclassify and display said classified image in the differing one of said defect-classification display screen areas.